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EXAMINER
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CORBO, NICHOLAS T

ART UNIT	PAPER NUMBER
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2427

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 09/21/2009 have been fully considered but they are not persuasive.

Referring to Applicant's argument on pages 9-10 of Applicant's Remarks alleging that Bishop does not contemplate a feature in which the display 30 reads the data stored in either of the display buffers A and B, the Examiner respectfully disagrees. As cited by the Examiner in the Office Action dated 07/06/2009, Bishop discloses that images are alternately selected from display buffer A and display buffer B, and that those images are read from the selected buffers to the display as seen in Col. 5, Lines 25-29. The Applicant does not supply any further argument as to how the prior art supplied by the Examiner does not meet the limitations as claimed, and therefore the rejection is sustained.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 4-6, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art Oki et al (hereinafter referred to as Oki)

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JP 2002209193A in view of Bishop et al (hereinafter referred to as Bishop) US 4910683.

Referring to claim 1, Oki discloses a video information distribution and display system comprising:

a video information distribution device that distributes and outputs video information including dynamic image video information and processed digital static image video information, and an image control signal (**see Paragraph 0012 for disclosing a video information distribution device distributing animation/dynamic image video information and processed/compressed (see Paragraph 0025 for disclosing the still pictures are transmitted after carrying out data compression) digital static image/still picture video information, and see Paragraph 0016 and 0032 for disclosing the image control signal**) for disclosing ; and

a video information receiving and display device that receives and displays the video information (**see Paragraphs 0012-0015 for disclosing the train loading/receiving video information distribution display system**), wherein

Oki is unclear as to the display device restores in advance a state before processing of processed digital static image video information of a next static image to be displayed, in accordance with an instruction of the image control signal, and stands by for the next display.

Bishop discloses a display device restores in advance a state before processing of processed digital static image video information of a next static image to be

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displayed, in accordance with an instruction of the image control signal, and stands by for the next display (**see Col. 5, Line 6-29 for disclosing the next image to be displayed is restored/rendered into the display buffer that is not being displayed/standing by for next display in accordance with an instruction of a image control signal**) and a schedule management section generating the image control signal on the basis of schedule data in which a display order and a display time of the plural video information are specified (**see Col. 5, Lines 6-29 for disclosing the generating of a control signal on the basis of schedule data in which a “display order and a display time” (or indication of which buffer to display from (order) immediately and consequently, the other buffer being next (time)) of the plural video information are specified**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the known technique of double buffering images of Bishop with the system of Oki in order to improve the displaying of images by avoiding the need to recalculate and redisplay all points comprising the displayed image any time a change of the relative viewpoint of the data is request by a user (**see Bishop, Col. 1, Lines 13-36**).

Referring to claim 2, Oki discloses the dynamic image video information is transmitted via a first transmission line and the processed digital static image video information is transmitted via a second transmission (**see Paragraph 0012**).

Referring to claim 4, Oki in view of Bishop discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further comprises first and second storage (buffer) areas, wherein static image data of each image to be displayed is restored and stored in a sequential alternative fashion in one of the first storage area or the second storage area (**see Fig. 1 and Col. 5, Line 6-29 for disclosing the first (A) and second (B) storage areas/display buffers attached to the display system 30 wherein the still images are restored/rendered and stored into the display buffers in a sequential alternative fashion/double buffering technique between each buffer**).

Referring to claim 5, Oki in view of Bishop discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further discloses the display device further comprises the sequential alternative fashion that determines an order of storage in one of the first storage area or the second storage area is determined from content designation information contained in the image control signal (**see Col. 5, Lines 22-29 for disclosing the image control signal determines the sequential alternating selection of the display buffers for display, and consequently storage**).

Referring to claim 6, Oki discloses the video information distribution and display system further comprises the processed digital static image video information includes information for displaying a greater image resolution than the dynamic image video

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information (**see Paragraphs 0025-0027 for disclosing the still image are capable of displaying at a greater image resolution than the moving/dynamic image video information**).

Referring to claim 8, Oki in view of Bishop discloses the video information distribution and display system including the video information receiving and display device as seen in the rejection of claim 1.

Bishop further discloses the display device comprises two storage areas for storing the static image to be displayed, and the static image to be displayed the next time is previously stored to any one of the storage areas (**see Fig. 1 and Col. 5, Line 6-29 for disclosing the first (A) and second (B) storage areas/display buffers attached to the display system 30 wherein the still images are restored/rendered and stored into the display buffers in a sequential alternative fashion/double buffering technique between each buffer**).

Referring to claim 9, Oki in view of Bishop discloses the video information distribution and display system as seen in the rejection of claim 1.

Bishop further discloses wherein a display time of each segment of the video information is a time longer than a time for the segment to be stored to one of the storage areas by returning the segment to a state before the processed digital static image video information is processed in the video information receiving and display device (**see Col. 5, Line 61 – Col. 6, Line 3**).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art Oki et al (hereinafter referred to as Oki) JP 2002209193A in view of Bishop et al (hereinafter referred to as Bishop) US 4910683, and further in view of Potrebic et al (hereinafter referred to as Potrebic) US 6804824.

Referring to claim 3, Oki in view of Bishop discloses the limitations of claim 1 including the video information distribution device, the processed digital static image video information, the dynamic image video information, and the distribution and output of the information, and the video information receiving and display device.

Oki in view of Bishop fails to disclose the video information distribution device multiplexes the processed digital static image video information to the dynamic image video information, and the video information receiving and display device demultiplexes the processed digital static image video information from the multiplexed dynamic image video information.

Potrebic et al discloses the video information distribution device multiplexes the processed digital static image video information to the dynamic image video information **(see Col. 1, Lines 29-33 for disclosing all digital programming including both types of video information being multiplexed together by the provider/distribution device)**, and the video information receiving and display device demultiplexes the processed digital static image video information from the multiplexed dynamic image video information **(see Col. 1, Lines 33-36 and Col. 7, Lines 50-63 for disclosing the**



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**multiplexed data is identifiably packetized so that when demultiplexed at the client set top box/receiving and display device they are separated from the other data that they were multiplexed with at the provider).**

At the time of the invention, it would have been obvious to use the known technique of multiplexing and demultiplexing before transmission of various types of data over a single transmission line of a network of Potrebic with the known system of Oki in view of Bishop in order to take advantage of the well known technique to predictably improve the system by reducing the number of transmission paths needed to deliver the data to each receiver.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al (hereinafter referred to as Oki) JP 2002209193A in view of Bishop et al (hereinafter referred to as Bishop) US 4910683, and further in view of Duso et al (hereinafter referred to as Duso) US 6625750.

Referring to claim 10, Oki in view of Bishop discloses the schedule management section and the video information receiving and display device limitations as seen in the rejection of claim 1.

Oki in view of Bishop is unclear as to in a case where video information not included in the schedule data is to be displayed, the schedule management section generate an interrupt image control signal for displaying the video information not

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included in the schedule data, and outputs an interrupt image control signal to the video information receiving and display device that is collated with schedule data

Duso discloses in a case where video information not included in the schedule data is to be displayed, generation of an interrupt image control signal for displaying the video information not included in the schedule data, and output of an interrupt image control signal to the device that is collated with schedule data (**see Figs. 34-35 and Col. 45, Line 25 – Col. 48, Line 39 for disclosing when video information not included in the schedule (“one or more clips” not in the original playlist created in step 422) an interrupt image control signal for displaying the clips not included in the playlist/schedule can be generated and sent to the display device (step 423 to 424) to insert the clips not originally included into the schedule).**

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to incorporate the known technique of inserting events into a previously set schedule with the known system of Oki in view of Bishop in order to predictably improve the system by allowing the convenience of dynamically revising the play-list during broadcast with new material (**see Duso, Col. 48, Lines 22-26**).

### ***Allowable Subject Matter***

6. Claim 11 is allowed.

The following is an examiner's statement of reasons for allowance: In regards to independent claim 11, the prior art of record fails to anticipate or render obvious the combined elements/steps of "immediately distributes the interrupt image control signal

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to the video information receiving and display device if a time up to a next image changeover is long in comparison with a time required for decompression and storage of the video information not included in the schedule data, and, if said time is short, distributes the interrupt image control signal to the video information receiving and display device after an image control signal changing over to a next image is transmitted”, as recited in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

The Examiner discloses in the above Office Action that Oki in view of Bishop, and further in view of Duso discloses the limitations regarding the distribution of the plural video information, such as dynamic and still images and an image control signal controlling the display order of static images on a video information receiving and display device containing two storage areas, or buffers, in which the display of sequential (according to a schedule) static images is alternated using said buffers. The prior art references of record further disclose the display time of each image to be a time longer than the time required to prepare the next image for display and an interrupt image control signal to include video information in the schedule that was not originally included in the schedule. Taaffe et al US 5179651 further discloses the compression of images during transfer and decompression of said images when the transfer is complete prior to storing them in a local storage to achieve higher transfer speeds.

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Hodges et al US 20030046687 discloses a process of comparing the delay between an original program stream and a modified program stream in the case of a selected substitute duration for a programming break, wherein the duration of the programming break is matched against acceptable predetermined range (minimum/maximum) delay and the substitute duration is either implemented at the current break or the following break is looked to based on the comparison. However, the Examiner concedes that the condition of whether to send the interrupt image control signal immediately or after the image control signal changes over to the next scheduled image is based on the calculation of time required to decompress and store the image not originally included in the schedule being inserted by the interrupt image control signal in comparison to the time up to the next scheduled image changeover overcomes the art of record either alone or in combination.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS CORBO whose telephone number is (571)270-5675. The examiner can normally be reached on Monday through Friday 900am-530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571)272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

N.T.C.  
Examiner, Art Unit 2427

12/30/2009

/Jason P Salce/  
Primary Examiner, Art Unit 2421